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**MINISTRY OF DATA
HACKATHON**
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Presented by:



PROBLEM TITLE

The Prediction Postulate

How might we better

identify the drivers, indicators and triggers of potential problems early and predict incidents within the network to enable condition based maintenance and reduce asset failure?

PROBLEM STORY

Some parts of the Water Corp network are almost 100 years old while other parts have just been laid but at anytime a part can fail and cause disruption and other failures to cascade through the network.

The silly thing is that these are just engineered systems and we know there will have been some kind of pre-failure indicators and known conditions that will cause failures but we can't effectively detect and collate all the data because there's so much and most is underground.

This leaves us sometimes unprepared and anxious but if we could see and understand the big picture we could take control and be proactive.

Scale/Impact:

HIGH

Cost to service large network.
Hard to access but high upside.
Failures are very disruptive.

Data Description & Source

- Pump and asset data
- Engineering details
- W.C. Asset performance data

Mentors & Contacts

TBC

4 key outcomes / constraints / statements

1. Thousands of kms of pipe network
2. Long build history
3. Complex mix of failure types
4. Much of the network is hard to access